

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. TBA  
Applicant(s): HAAS, Thomas et al.  
Filed: Concurrently Herewith  
TC/A.U. TBA  
Examiner: TBA  
Title: Process for the Epoxidation of Olefins

Confirmation No.: TBA

Docket No.: 032301.320  
Customer No.: 25461

INFORMATION DISCLOSURE STATEMENT

**MAIL STOP PATENT APPLICATION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. 1.56, Applicants are enclosing an Information Disclosure Statement by Applicant (Form PTO/SB/08a) and copies of the documents cited therein. The relevance of the cited documents is indicated in the specification being submitted herewith and in the pending patent applications and issued patents related to the subject application being further identified on the attached list.

It is respectfully requested that the cited documents be considered by the Examiner in the above-identified patent application and that the cited documents be made officially of record therein. It is further requested that a listing of the same appear on the face of any patent which may issue from this application.

A first Official Action has not yet issued for this application. Therefore, it is believed that no fees are due under 37 C.F.R. Section 1.97(b)(3).

Respectfully submitted,

SMITH, GAMBRELL & RUSSELL, LLP



By: Robert G. Weilacher, Reg. No. 20,531

Dated: November 25, 2003  
Suite 3100, Promenade II  
1230 Peachtree Street, N.E.  
Atlanta, Georgia 30309-3592  
Ph: (404) 815-3593  
Fax: (404) 685-6893

**RELATED U.S. PATENT APPLICATIONS AND ISSUED U.S. PATENTS**

1. U.S. Pat. No.: 6,600,055  
Issue Date: 07/29/2003  
Applicant(s): Thomas HAAS et al.  
Title: Process for the Epoxidation of Olefins  
Atty. Dkt. No.: 032301.176
2. U.S. Pat. No.: 6,608,219  
Filing Date: 08/19/2003  
Applicant(s): Thomas HAAS et al.  
Title: Process for the Epoxidation of Olefins  
Atty. Dkt. No.: 032301.177
3. U.S. Pat. No.: 6,596,881  
Filing Date: 07/22/2003  
Applicant(s): Thomas HAAS et al.  
Title: Process for the Epoxidation of Olefins  
Atty. Dkt. No.: 032301.178
4. Serial No.: 10/174,549  
Filing Date: 06/18/2002  
Applicant(s): Willi HOFEN et al.  
Title: Process for the Recovery of Combustible Components of a Gas Stream  
Atty. Dkt. No.: 032301.179
5. U.S. Pat. No.: 6,610,865  
Filing Date: 08/26/2003  
Applicant(s): Willi HOFEN et al.  
Title: Process for the Epoxidation of Olefins  
Atty. Dkt. No.: 032301.2081
6. U.S. Pat. No.: 6,596,883  
Filing Date: 07/22/2003  
Applicant(s): Willi HOFEN et al.  
Title: Process for the Epoxidation of Olefins  
Atty. Dkt. No.: 032301.210
7. U.S. Pat. No.: 6,617,465  
Issue Date: 09/09/2003  
Applicant(s): Georg THIELE et al.  
Title: Process for the Epoxidation of Olefins  
Atty. Dkt. No.: 032301.252
8. Serial No.: 10/384,217  
Filing Date: 03/07/2003  
Applicant(s): Willi HOFEN et al.  
Title: Process for the Epoxidation of Olefins  
Atty. Dkt. No.: 032301.270

9.     Serial No.:     10/428,607  
       Filing Date:   05/02/2003  
       Applicant(s):   Thomas HAAS et al.  
       Title:          Process for the Epoxidation of Olefins  
       Atty. Dkt. No.: 032301.282
10.    Serial No.:     10/463,780  
       Filing Date:   06/17/2003  
       Applicant(s):   Willi HOFEN et al.  
       Title:          Process of Separating 1-Methoxy-2-Propanol and 2-Methoxy-1-Propanol from  
                          Aqueous Compositions  
       Atty. Dkt. No.: 032301.291
11.    Serial No.:     10/203,186  
       Filing Date:   10/04/2002  
       Applicant(s):   Willi HOFEN et al.  
       Title:          Process for the Epoxidation of Olefins  
       Atty. Dkt. No.: 032301.292
12.    Serial No.:     10/203,184  
       Filing Date:   10/04/2002  
       Applicant(s):   Willi HOFEN et al.  
       Title:          Process for the Epoxidation of Olefins  
       Atty. Dkt. No.: 032301.293
13.    U.S. Pat. No.:   6,624,319  
       Issue Date:     09/23/2003  
       Applicant(s):   Willi HOFEN et al.  
       Title:          Process for the Epoxidation of Olefins  
       Atty. Dkt. No.: 032301.294
14.    Serial No.:     10/669,978  
       Filing Date:   09/24/2003  
       Applicant(s):   Thomas HAAS et al.  
       Title:          Aqueous Hydrogen Peroxide Solutions and Method of Making Same  
       Atty. Dkt. No.: 032301.309
15.    Serial No.:     10/669,993  
       Filing Date:   09/24/2003  
       Applicant(s):   Thomas HAAS et al.  
       Title:          Process for the Epoxidation of Olefins  
       Atty. Dkt. No.: 032301.310
16.    Serial No.:     60/428,932  
       Filing Date:   11/26/2002  
       Applicant(s):   Willi HOFEN et al.  
       Title:          Process for the Purification of Crude Propene Oxide  
       Atty. Dkt. No.: 032301.319

17.     Serial No.:     60/428,934  
       Filing Date:   11/26/2002  
       Applicant(s):   Thomas HAAS et al.  
       Title:          Process for the Epoxidation of Olefins  
       Atty. Dkt. No.: 032301.320
  
18.     Patent No.:    5,620,935  
       Issue Date:     04/15/1997  
       Serial No.:     08/664,010  
       Filing Date:    06/14/1996  
       Applicant(s):   Georg THIELE  
       Title:          Method for the Regeneration of A Catalyst  
       Atty. Dkt. No.: 032301.52195
  
19.     Patent No.:    5,675,026  
       Issue Date:     10/07/1997  
       Serial No.:     08/668,451  
       Filing Date:    06/21/1996  
       Applicant(s):   Georg THIELE  
       Title:          Process for the Production of Epoxides from Olefins  
       Atty. Dkt. No.: N/A
  
20.     Patent No.:    6,372,924  
       Issue Date:     04/16/2002  
       Serial No.:     09/663,703  
       Filing Date:    09/18/2000  
       Applicant(s):   Georg THIELE  
       Title:          Process for the Preparation of Epoxides from Olefins  
       Atty. Dkt. No.: N/A

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

1

of

4

**Complete if Known**

Application Number

To Be Assigned

Filing Date

Concurrent Herewith

First Named Inventor

HAAS, Thomas et al.

Group Art Unit

To Be Assigned

Examiner Name

To Be Assigned

Attorney Docket Number

032301.320

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
		US- 2,870,171	01-20-1959	GABLE	5 pages
		US- 4,410,501	10-18-1983	TARAMASSO ET AL.	8 pages
		US- 4,833,260	05-23-1989	NERI ET AL.	7 pages
		US- 4,999,179	03-12-1991	SUGIHARA ET AL.	6 pages
		US- 5,523,426	06-04-1996	JUBIN, JR. ET AL.	8 pages
		US- 5,591,875	01-07-1997	CHANG ET AL.	6 pages
		US- 5,599,955	02-04-1997	VORA ET AL.	11 pages
		US- 5,620,935	04-15-1997	THIELE	4 pages
		US- 5,675,026	10-07-1997	THIELE	7 pages
		US- 5,760,253	06-02-1998	DANNER ET AL.	9 pages
		US- 5,849,937	12-15-1998	JUBIN, JR. ET AL.	9 pages
		US- 5,849,938	12-15-1998	REUTER ET AL.	6 pages
		US- 5,912,367	06-15-1999	CHANG	6 pages
		US- 6,042,807	03-28-2000	FARAJ	6 pages
		US- 6,063,941	05-16-2000	GILBEAU	4 pages
		US- 6,372,924	04-16-2002	THIELE	6 pages
		US- 6,429,322	08-06-2002	CATINAT ET AL.	3 pages

**FOREIGN PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		DE 100 26 363	11-29-2001	MERCK PATENT GMBH	9 pages	✓
		DE 196 23 611	12-18-1997	BASF AG	7 pages	✓
		DE 197 23 950	12-10-1998	BASF AG	15 pages	✓
		DE 197 54 185	02-04-1999	DEG ENGINEERING GMBH	7 pages	✓
		DE 198 35 907	02-17-2000	BASF AG	11 pages	✓
		DE 199 36 547	02-15-2001	BASF AG	11 pages	✓
		EP 0 100 118	02-08-1984	ANIC SPA	15 pages	
		EP 0 100 119	02-08-1984	ANIC SPA	21 pages	
		EP 0 133 510	02-27-1985	BASF AG	8 pages	✓
		EP 0 230 349	07-29-1987	INTERNATIONAL BUSINESS MACHINES CORP	58 pages	
		EP 0 230 949	08-05-1987	ENIRICERCH SPA	18 pages	
		EP 0 425 893	05-08-1991	BASF AG	7 pages	✓
		EP 0 568 336	11-03-1993	ARCO CHEMICAL TECHNOLOGY INC	13 pages	
		EP 0 568 337	11-03-1993	ARCO CHEMICAL TECHNOLOGY LP	15 pages	

Examiner  
SignatureDate  
Considered<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.<sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.<sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO			<b><i>Complete if Known</i></b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			Application Number	To Be Assigned
			Filing Date	Concurrent Herewith
			First Named Inventor	HAAS, Thomas et al.
			Group Art Unit	To Be Assigned
			Examiner Name	To Be Assigned
			Attorney Docket Number	032301.320
Sheet	2	of	4	

[illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	To Be Assigned
				Filing Date	Concurrent Herewith
				First Named Inventor	HAAS, Thomas et al.
				Group Art Unit	To Be Assigned
				Examiner Name	To Be Assigned
				Attorney Docket Number	032301.320
Sheet	3	of	4		

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		WO 97/47613	12-18-1997	BASF AG	17 pages	✓
		WO 97/47614	12-18-1997	BASF AG	21 pages	✓
		WO 98/47845	10-29-1998	BASF AG	16 pages	✓
		WO 99/01445	01-14-1999	ARCO CHEMICAL TECHNOLOGY LP	24 pages	
		WO 99/07690	02-18-1999	ARCO CHEMICAL TECHNOLOGY LP	16 pages	
		WO 99/08985	02-25-1999	ARCO CHEMICAL TECHNOLOGY LP	20 pages	
		WO 99/11639	03-11-1999	ARCO CHEMICAL TECHNOLOGY LP	20 pages	
		WO 99/14208	03-25-1999	SOLVAY SA	15 pages	✓
		WO 99/23052	05-14-1999	SOLVAY SA	20 pages	✓
		WO 00/07695	02-17-2000	BASF AG	7 pages	✓
		WO 00/17178	03-30-2000	ARCO CHEMICAL TECHNOLOGY LP	24 pages	
		WO 00/25881	05-11-2000	KRUPP UHDE GMBH	37 pages	✓
		WO 00/76989	12-21-2000	BASF AG	18 pages	✓
		WO 01/57009	08-09-2001	DEGUSSA AG	14 pages	
		WO 01/57010	08-09-2001	DEGUSSA AG	21 pages	
		WO 01/57012	08-09-2001	SOLVAY SA	25 pages	✓
		WO 01/68623	09-20-2001	SOLVAY SA	17 pages	✓
		WO 01/92242	12-06-2001	SOLVAY SA	14 pages	
		WO 02/00634	01-03-2002	SOLVAY SA	32 pages	✓
		WO 02/00635	01-03-2002	SOLVAY SA	19 pages	✓
		WO 02/02544	01-10-2002	BASF AG	27 pages	✓
		WO 02/02545	01-10-2002	BASF AG	26 pages	
		WO 02/14298	02-21-2002	ENICHEM SPA	30 pages	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**Complete if Known**

### To Be Assigned

Concurrent Herewith

HAAS, Thomas et al.

### To Be Assigned

### To Be Assigned

032301.320

4

4

of

4

## OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

[illegible]

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

+